



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0838; Project Identifier AD-2020-01590-A; Amendment 39-21965; AD 2022-05-13]

RIN 2120-AA64

Airworthiness Directives; Honda Aircraft Company LLC Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Honda Aircraft Company LLC (Honda) Model HA-420 airplanes. This AD was prompted by a report of in-flight smoke and fire that initiated from the windshield heat power wire braid. This AD requires incorporating temporary revisions into the airplane flight manual (AFM) and the quick reference handbook (QRH) that modify procedures for windshield heat operation until the affected windshield assemblies are replaced. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Honda Aircraft Company LLC, 6430 Ballinger Road, Greensboro, NC 27410; phone: (336) 662-0246; website: <http://www.hondajet.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0838.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0838; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Bryan Long, Aviation Safety Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: (404) 474-5578; email: bryan.long@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain serial-numbered Honda Model HA-420 airplanes. The NPRM published in the *Federal Register* on September 30, 2021 (86 FR 54126). The NPRM was prompted by a report of in-flight smoke and fire that initiated from the windshield heat power wire braid on a Honda Model HA-420 airplane. An investigation identified that certain Honda Model HA-420 airplanes could have a severed windshield heat power wire braid from installation of the windshield heat wiring during manufacture. The severed windshield heat power wire braid could cause arcing that ignites the wire sheathing and sealant and the windshield acrylic. This condition, if not addressed, could lead to cockpit smoke and fire. In the NPRM, the FAA proposed to require incorporating temporary revisions into the AFM and the QRH that modify procedures for windshield heat operation until the affected windshield assemblies are replaced. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from three commenters. The commenters were an individual, an anonymous commenter, and Honda. The following presents the comments received on the NPRM and the FAA's response to each comment.

Comment Regarding Whether Windshield Replacement is Justified

An individual requested that the NPRM be re-evaluated. The commenter stated that although fire is one of the greatest dangers in the cockpit, there is insufficient data to justify requiring windshield assembly replacement. The commenter noted that the proposed AD is based on a single occurrence of cockpit smoke and fire.

The FAA considered not only the occurrence of cockpit smoke and fire but also the possible results of a severed windshield heat power wire braid. A severed windshield heat power wire braid could ignite the wire sheathing and sealant and the windshield acrylic and lead to cockpit smoke and fire. The FAA's analysis determined that an unsafe condition exists and is likely to exist or develop in airplanes of the same type design. Accordingly, this condition warrants corrective action through an AD. The FAA did not change this AD based on this comment.

Request to Extend the Compliance Time for Replacing the Windshield Assembly

Honda requested that the FAA extend the compliance time for replacing the windshield assembly in paragraph (h) of the proposed AD from within 24 months to within 36 months after the effective date of the AD. In support, Honda stated that there is a shortage of parts due to supply chain disruptions caused by the COVID-19 pandemic. Honda explained that extending the compliance time would not increase risk to affected airplanes because of other mitigating actions in place, such as service information detailing the risk of windshield electrical arcing and the revised flight manual procedures, which reduce the exposure to an arcing event.

The FAA has determined that the 24-month compliance time for windshield assembly replacement is the maximum time allowable for the affected airplanes to continue to safely operate. While the FAA makes every effort to avoid grounding aircraft, the FAA cannot base its AD action on whether spare parts are available or can be produced. However, operators may request approval to extend the compliance time as an

alternative method of compliance (AMOC) under paragraph (j)(1) of this final rule, provided sufficient data are submitted. The FAA did not change this AD based on this comment.

Request to Consider Honda's Recommendation

An anonymous commenter requested that the FAA consider Honda's recommendation to replace the windshield assembly and incorporate it into the mandatory maintenance of the airplane. The commenter stated that although Honda issued a service bulletin, the FAA did not include it in the NPRM.

The commenter's requested change is not necessary because paragraph (h) of this AD already requires windshield assembly replacement in accordance with the steps in the Honda service bulletin. In addition, as 14 CFR part 39 requires that operators comply with ADs, replacement of the windshield assembly is mandatory. The FAA did not change this AD based on this comment.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Related Service Information under 1 CFR Part 51

The FAA reviewed the following temporary revisions.

- Honda Aircraft Company Temporary Revision TR 04A-1, dated 2020, for Airplane Flight Manual HJ1-29001-003-001 Rev C.
- HondaJet Temporary Revision TR 04A-1, dated 2020, for Quick Reference Handbook HJ1-29000-007-001 Rev C.
- Honda Aircraft Company Temporary Revision TR 04A-1, dated 2020, for Airplane Flight Manual HJ1-29001-003-001 Rev E.
- HondaJet Temporary Revision TR 04A-1, dated 2020, for Quick Reference Handbook Normal Procedures Rev E, HJ1-29001-007-001.

These temporary revisions provide modified procedures for windshield heat operation to reduce exposure to potential windshield heat for the applicable serial

numbers specified on the documents.

The FAA also reviewed Honda Service Bulletin SB-420-56-002, Revision B, dated April 19, 2021 (Honda SB-420-002B). The service bulletin specifies identifying and replacing affected windshield assemblies. The service bulletin also specifies removing the temporary revisions to the AFM, QRH, and electronic checklist (ECL) after the affected windshield assemblies have been replaced.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Differences Between This AD and the Service Information

Honda issued temporary revisions to the AFM, QRH, and ECL prior to issuing Honda SB-420-002B, which specifies replacement of the windshield assemblies. Honda SB-420-002B does not specify incorporating the temporary revisions to the AFM, QRH, and ECL but addresses removal if the temporary revisions were incorporated. This AD does not require incorporating or removing the temporary revisions to the ECL because the ECL is not part of the approved type design of the airplane. All pertinent requirements would be addressed through the AFM.

Costs of Compliance

The FAA estimates that this AD affects 156 airplanes of U.S. registry. There are 475 affected windshield assemblies worldwide, and the FAA has no way of knowing the number of affected windshield assemblies installed on U.S. airplanes. The estimated cost on U.S. operators reflects the maximum possible cost based on the 156 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Insert revised procedures in the AFM and QRH	1 work-hour X \$85 per hour = \$85	Not applicable	\$85	\$13,260

* Windshield assembly replacement (both left and right assemblies)	154 work-hours X \$85 per hour = \$13,090	\$153,286	\$166,376	\$25,954,656
Remove revised procedures from the AFM and QRH	1 work-hour X \$85 per hour = \$85	Not applicable	\$85	\$13,260

* On most airplanes, both the left and right windshield assemblies have a serial number affected by the unsafe condition, and the above costs represents replacement of both the left and right windshield assemblies. However, some airplanes may only have one affected windshield assembly and not require replacement of both.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2022-05-13 Honda Aircraft Company LLC: Amendment 39-21965; Docket No. FAA-2021-0838; Project Identifier AD-2020-01590-A.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Honda Aircraft Company LLC Model HA-420 airplanes, serial numbers 42000011 through 42000179, 42000182, and 42000187, certificated in any category, with a windshield assembly installed that has a part number and serial number listed in table 5 of the Accomplishment Instructions in Honda Aircraft Company Alert Service Bulletin SB-420-56-002, Revision B, dated April 19, 2021 (Honda SB-420-56-002, Revision B).

(d) Subject

Joint Aircraft System Component (JASC) Code 3040, Windshield/Door Rain/Ice Removal.

(e) Unsafe Condition

This AD was prompted by a report of in-flight smoke and fire that initiated from the windshield heat power wire braid. The FAA is issuing this AD to prevent arcing of the windshield heat power wire braid, which could ignite the wire sheathing and sealant and the windshield acrylic. This condition, if not addressed, could lead to cockpit smoke and fire.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Temporary Revisions to the Airplane Flight Manuals (AFMs) and Quick Reference Handbooks (QRHs)

(1) Within 15 days after the effective date of this AD, revise the existing AFM and QRH for your airplane by inserting the pages identified in the applicable temporary revisions listed in paragraphs (g)(1)(i) through (iv) of this AD.

(i) Honda Aircraft Company Temporary Revision TR 04A-1, dated 2020, for Airplane Flight Manual HJ1-29001-003-001 Rev C.

(ii) HondaJet Temporary Revision TR 04A-1, dated 2020, for Quick Reference Handbook HJ1-29000-007-001 Rev C.

(iii) Honda Aircraft Company Temporary Revision TR 04A-1, dated 2020, for Airplane Flight Manual HJ1-29001-003-001 Rev E.

(iv) HondaJet Temporary Revision TR 04A-1, dated 2020, for Quick Reference Handbook Normal Procedures Rev E, HJ1-29001-007-001.

(2) The actions required by paragraph (g)(1) of this AD may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR 43.9(a)(1) through (4), and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(h) Windshield Assembly Replacement

Within 24 months after the effective date of this AD, for each windshield assembly with a part number and serial number listed in table 5 of the Accomplishment Instructions in Honda SB-420-56-002, Revision B, replace the windshield assembly in

accordance with step (2) or (3) of the Accomplishment Instructions in Honda SB-420-56-002, Revision B.

(i) Removal of Revisions to the AFMs and QRHs

Before further flight after replacing the windshield assemblies required by paragraph (h) of this AD, remove the AFM and QRH pages that were required by paragraph (g) of this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) For service information that contains steps that are labeled as “Required for Compliance” (RC), the following provisions apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(k) Related Information

For more information about this AD, contact Bryan Long, Aviation Safety Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: (404) 474-5578; email: Bryan.Long@faa.gov.

(I) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Honda Aircraft Company Temporary Revision TR 04A-1, dated 2020, for Airplane Flight Manual HJI-29001-003-001 Rev C.

(ii) Honda Aircraft Company Temporary Revision TR 04A-1, dated 2020, for Airplane Flight Manual HJ1-29001-003-001 Rev E.

(iii) HondaJet Temporary Revision TR 04A-1, dated 2020, for Quick Reference Handbook HJ1-29000-007-001 Rev C.

(iv) HondaJet Temporary Revision TR 04A-1, dated 2020, for Quick Reference Handbook Normal Procedures Rev E, HJ1-29001-007-001.

(v) Honda Aircraft Company Alert Service Bulletin SB-420-56-002, Revision B, dated April 19, 2021.

(3) For service information identified in this AD, contact Honda Aircraft Company LLC, 6430 Ballinger Road, Greensboro, NC 27410; phone: (336) 662-0246; website: [https:// www.hondajet.com](https://www.hondajet.com).

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on February 25, 2022.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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